

## Supplementary Figure Legends

Figure S1. *Glc7* overexpression stabilizes Clb2 independently of Bub2 activity.

*CLB2-myc bub2* mutant cells with (SBY3638) or without (SBY3637) *pGAL-GLC7* were analyzed for Clb2 levels.

Figure S2. *Glc7-10* cells stabilize Pds1 at the non-permissive temperature.

*GLC7* (SBY8132) and *glc7-10* (SBY2083) cells were arrested in G1 at 23 degrees and then released to 30 degrees for 30 min to allow cells to exit from the pheromone arrest (note that *glc7-10* cells do not release from pheromone arrest at 37 degrees). The cells were then shifted to 37 degrees for the remainder of the time course and Pds1 levels were monitored by immunoblotting at the indicated time points (min).

Figure S3. *Glc7-10* cells are delayed in cell cycle entry. *GLC7* (SBY8132) and *glc7-10* (SBY2083) cells were arrested in G1 at 23 degrees and then released to 30 degrees. The percentage of budded cells was quantified every 20 min.

**Supplementary Table I. Yeast strains used in this study**

Strain	Genotype
SBY214	<i>MATa ura3-1 leu2,3-112 his3-11:pCUP-GFP12-lacI12:HIS3 trp1-1:256lacO:TRP1 lys2<sup>Δ</sup> ade2-1 can1-100 bar1</i>
SB1159	<i>MATa ura3-1:GFP-TUB1:URA3 leu2,3-112 his3-11 trp1-1 ade2-1 can1-100 bar1</i>
SBY1306	<i>MATa ura3-1 leu2,3-112 his3-11,15 trp1-1:glc7-10:TRP1 ade2-1 can1-100 glc7::LEU2 bar1</i>
SBY1308	<i>MATa ura3-1 leu2,3-112 his3-11,15 trp1-1:GLC7:TRP1 ade2-1 can1-100 glc7::LEU2 bar1</i>
SBY1293	<i>MATa ura3-1 leu2,3-112 his3-11,15:pCUP-GFP12-lacI12:HIS3 trp1-1:256lacO:TRP1 lys2<sup>Δ</sup> ade2-1 can1-100 PDS1-myc18:LEU2 bar1 [pSB344, pGAL-GLC7, URA3, CEN]</i>
SBY1650	<i>MATa ura3-1 leu2,3-112 his3-11,15:pCUP-GFP12-lacI12:HIS3 trp1-1:256lacO:TRP1 lys2<sup>Δ</sup> ade2-1 can1-100 PDS1-myc18:LEU2 bar1 [pRS316, URA3, CEN]</i>
SBY1848	<i>MATa ura3-1 leu2,3-112 his3-11,15:pCUP-GFP12-lacI12:HIS3 trp1-1:256lacO:TRP1 mcd1-1 lys2<sup>Δ</sup> ade2-1 can1-100 PDS1-myc18:LEU2 bar1 [pSB344, pGAL-GLC7, URA3, CEN]</i>
SBY1849	<i>MATa ura3-1 leu2,3-112 his3-11,15:pCUP-GFP12-lacI12:HIS3 trp1-1:256lacO:TRP1 mcd1-1 lys2<sup>Δ</sup> ade2-1 can1-100 PDS1-myc18:LEU2 bar1 [pRS316, URA3, CEN]</i>
SBY2076	<i>MATa ura3-1 leu2,3-112 his3-11 trp1-1 lys2<sup>Δ</sup> ade2-1 can1-100</i>

*Dam1-myc9:TRP1 Pds1-myc:LEU2 bar [pRS316, URA3, CEN]*

SBY2077 *MATa ura3-1 leu2,3-112 his3-11 trp1-1 lys2<sup>Δ</sup> ade2-1 can1-100*  
*Dam1-myc9:TRP1 Pds1-myc:LEU2 bar [pSB344, pGAL-GLC7,*  
*URA3, CEN]*

SBY2083 *MATa ura3-1 leu2,3-112 his3-11,15 trp1-1:glc7-10:TRP1 ade2-1*  
*can1-100 glc7::LEU2 bar1 PDS1-myc18:LEU2*

SBY2377 *MATa ura3-1 leu2,3-112 his3-11,15 trp1-1:GLC7:TRP1 ade2-1 can1-*  
*100 glc7::LEU2 mad2::HIS3 bar1*

SBY2400 *MATa ura3-1 leu2,3-112 his3-11,15 trp1-1:glc7-10:TRP1 ade2-1*  
*can1-100 glc7::LEU2 mad2::HIS3 bar1*

SBY2973 *MATa ura3-1:pGAL-GLC7:URA3 leu2,3-112 his3-11:pCUP-GFP12-*  
*lacI12:HIS3 trp1-1:256lacO:TRP1 lys2<sup>Δ</sup> ade2-1 can1-100 bar1*

SBY3045 *MATa ura3-1:pGAL-GLC7:URA3 leu2,3-112:GFP-TUB1:LEU2 his3-*  
*11 trp1-1 lys2<sup>Δ</sup> ade2-1 can1-100 bar1*

SBY3113 *MATa ura3-1:pGAL-GLC7:URA3 leu2,3-112 his3-11 trp1-1 lys2<sup>Δ</sup>*  
*ade2-1 can1-100 Clb2-myc13:HIS3 bar1*

SBY3116 *MATa ura3-1 leu2,3-112 his3-11 trp1-1 ade2-1 can1-100 Clb2-*  
*myc13:HIS3 bar1*

SBY3637 *MATa ura3-1 leu2,3-112 his3-11 trp1-1 ade2-1 can1-100 Clb2-*  
*myc13:HIS3 bar1 bub2<sup>Δ</sup>KAN*

SBY3638 *MATa ura3-1:pGAL-GLC7:URA3 leu2,3-112 his3-11 trp1-1 ade2-1*  
*can1-100 Clb2-myc13:HIS3 bar1 bub2<sup>Δ</sup>KAN*

SBY3670 *MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15 trp1-*

- 1:GLC7:TRP1 ade2-1 can1-100 glc7::LEU2 bar1
- SBY3680 MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15 trp1-1:glc7-10:TRP1 ade2-1 can1-100 glc7::LEU2 bar1
- SBY3844 MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15 trp1-1:GLC7:TRP1 ade2-1 can1-100 glc7::LEU2 mad2::HIS3 bar1 $\Delta$
- SBY3846 MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15 trp1-1:glc7-10:TRP1 ade2-1 can1-100 glc7::LEU2 mad2::HIS3 bar1
- SBY3854 MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15 trp1-1:GLC7:TRP1 lys2 $\Delta$  ade2-1 can1-100 glc7::LEU2 bar1 PDS1-myc18:LEU2
- SBY3856 MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15 trp1-1:glc7-10:TRP1 lys2 $\Delta$  ade2-1 can1-100 glc7::LEU2 bar1 PDS1-myc18:LEU2
- SBY4635 MATa ura3-1 leu2,3-112 his3-11,15 trp1-1:GLC7:TRP1 ade2-1 can1-100 glc7::LEU2 bar1 PDS1-myc18:LEU2 pMET-HA-CDC20:TRP1
- SBY4636 MATa ura3-1 leu2,3-112 his3-11,15 trp1-1:glc7-10:TRP1 ade2-1 can1-100 glc7::LEU2 bar1 PDS1-myc18:LEU2 pMET-HA-CDC20:TRP1
- SBY7883 MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15 trp1-1:GLC7:TRP1 lys2 $\Delta$  ade2-1 can1-100 glc7::LEU2 bar1 PDS1-myc18:LEU2 mad2 $\Delta$ HIS3
- SBY7884 MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15 trp1-1:glc7-10:TRP1 lys2 $\Delta$  ade2-1 can1-100 glc7::LEU2 bar1 PDS1-

- myc18:LEU2 mad2ΔHIS3*
- SBY8132 *MATa ura3-1 leu2,3-112 his3-11,15 trp1-1:GLC7:TRP1 lys2Δ ade2-1  
can1-100 glc7::LEU2 bar1 PDS1-myc18:LEU2*
- SBY8136 *MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15:pCUP1-  
GFP12-LacI12:HIS3 trp1-1:glc7-10:TRP1 ade2-1 can1-100  
glc7::LEU2 bar1 PDS1-myc18:LEU2 mad2ΔHIS3  
telomere:lacO256:LEU2*
- SBY8137 *MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15:pCUP1-  
GFP12-LacI12:HIS3 trp1-1:GLC7:TRP1 ade2-1 can1-100 glc7::LEU2  
bar1 PDS1-myc18:LEU2 mad2ΔHIS3 telomere:lacO256:LEU2*
- SBY8259 *MATa ura3-1:URA3 leu2,3-112 his3-11:pCUP-GFP12-lacI12:HIS3  
trp1-1:256lacO:TRP1 lys2<sup>Δ</sup> ade2-1 can1-100 PDS1-myc18:LEU2  
bar1 [pRS306]*
- SBY8260 *MATa ura3-1:pGAL-GLC7:URA3 leu2,3-112 his3-11:pCUP-GFP12-  
lacI12:HIS3 trp1-1:256lacO:TRP1 lys2<sup>Δ</sup> ade2-1 can1-100 PDS1-  
myc18:LEU2 bar1 [pKC1048]*
- SBY8261 *MATa ura3-1:pGAL-GLC7-H65K:URA3 leu2,3-112 his3-11:pCUP-  
GFP12-lacI12:HIS3 trp1-1:256lacO:TRP1 lys2<sup>Δ</sup> ade2-1 can1-100  
PDS1-myc18:LEU2 bar1 [pSB1589]*
- SBY8289 *MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15:pCUP1-  
GFP12-LacI12:HIS3 trp1-1:GLC7:TRP1 ade2-1 can1-100 glc7::LEU2  
bar1 PDS1-myc18:LEU2 chr8:CEN-lacO:TRP1*
- SBY8290 *MATa ura3-1:pGAL-MPS1-myc:URA3 leu2,3-112 his3-11,15:pCUP1-*

*GFP12-LacI12:HIS3 trp1-1:glc7-10:TRP1 ade2-1 can1-100*

*glc7::LEU2 bar1 PDS1-myc18:LEU2 chr8:CEN-lacO:TRP1*

All strains are isogenic with the W303 background. Plasmids are indicated by brackets.







